METHOD AND APPARATUS FOR RE-HYDRATING CROP WITH STEAM

Abstract of the Disclosure

A baler for forming large parallelepiped bales is equipped with a crop re-hydrating system for re-hydrating dry crop having a moisture content no greater than 14% with steam during the baling process. In one embodiment, the re-hydrating system includes a steam generator which mixes the steam with hot gas during the steam generation process, with the hot gas/steam mixture being distributed to treat the crop. In another embodiment, hot gas, in the form of hot air, is produced separate from the steam and is joined with it to form a mixture for distribution to treat the crop. In both embodiments, the hot gases serve to insulate and to transfer energy to the gaseous steam (saturated vapor), and are at no more than a minimum temperature required for preventing the steam from condensing prior to being applied to the crop. In a further embodiment, a nozzle is located adjacent crop to be re-hydrated, the nozzle being constructed for discharging a central stream of steam or a mixture of steam and gas that is enveloped and insulated from the atmosphere by hot gas so that the steam is prevented from condensing prior to coming into contact with the crop.

Assignment

The entire right, title and interest in and to this application and all subject matter disclosed and/or claimed therein, including any and all divisions, continuations, reissues, etc., thereof are, effective as of the date of execution of this application, assigned, transferred, sold and set over by the applicant(s) named herein to Deere & Company, a Delaware corporation having offices at Moline, Illinois 61265, U.S.A., together with all rights to file, and to claim priorities in connection with, corresponding patent applications in any and all foreign countries in the name of Deere & Company or otherwise.